Comments
Public Hearing for the Kampachi Fish Farms, LLC –Velella
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Mote Marine Laboratory

by

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Good evening. My name is Robert Weisberg; my professional title is Distinguished University Professor, and I am a professor of Physical Oceanography at the College of Marine Science, University of South Florida. My comments this evening are my own and are not those of my institution.

I am not here to advocate for, or against the Kampachi Fish Farm. Instead, I am here to state that the documents provided, totaling some 500pp, each with EPA, USACE and other imprimaturs are useless for providing assurances that problems will not arise.

Why? Because the ocean circulation determines the water properties in which the Kampachi Fish Farm will reside and the transport of materials that may issue from it. Yet, the ocean circulation is either ignored, or misrepresented in the documents. Despite readily available literature on the west Florida continental shelf circulation and its role in shelf ecology, the cited literature dates back to the 1970's when very little was known. Similarly, while a large data set now exists, only a snippet is presented and in a misleading manner, even without proper attribution. Thus, while the Environmental Assessment Draft covers a lot of material, it fails to cover what is important.

So what may be said of importance this evening? Under certain, and not uncommon conditions, materials issuing from the proposed Fish Farm can arrive on Captiva-Sanibel beaches within only a few days. This was determined via particle tracking simulations, an example of which I am about to show. I will add that this transport pathway is the same way that the region receives its red tide in most years, and it is also why gag grouper juveniles tend to be so abundant between the Tampa Bay and Charlotte Harbor estuaries.

Given more time, I could provide a series of such simulations, showing the broader scope of where materials might end up, or how *K. brevis* red tide could impact the Kampachi Fish Farm itself, or conversely, but I have to stop here.

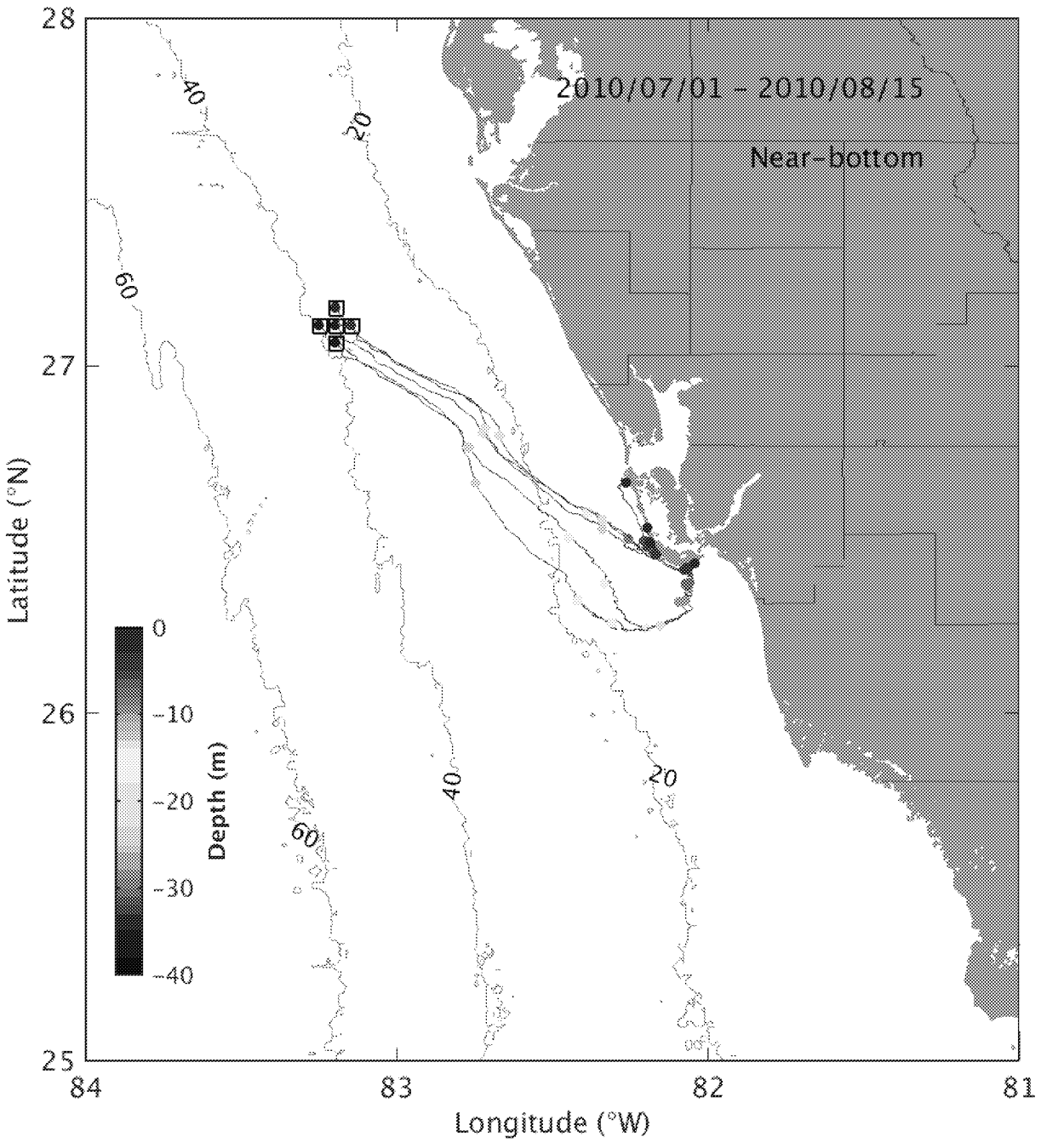

Figure 1. Particle trajectory simulations originating near bottom at the vicinity of the proposed Kampachi Fish Farm for the period July 1, 2010 through August 15, 2010. This was a period of anomalous upwelling caused by Gulf of Mexico Loop Current interacting with the west Florida shelf slope near the Dry Tortugas. As a consequence of such upwelling, which is not uncommon, the particles arrived at the Captiva-Sanibel beaches within 4-7 days.